



UNITED STATES PATENT AND TRADEMARK OFFICE

Handwritten signature or mark

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,559	12/20/2001	Michael V. Chobotov	24641-7005	4960

20350 7590 05/03/2005

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

PREBILIC, PAUL B

ART UNIT	PAPER NUMBER
----------	--------------

3738

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,559

Applicant(s)

CHOBOTOV ET AL.

Examiner

Paul B. Prebilic

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 72-149 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 124-142 is/are allowed.
- 6) ☒ Claim(s) 72-82, 85-96, 99, 102-119 and 122-149 is/are rejected.
- 7) ☒ Claim(s) 83, 84, 97, 98, 100, 101, 120 and 121 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/28/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 28, 2004 has been entered.

Information Disclosure Statement

Most of the documents cited in the information disclosure statement of December 28, 2004 were considered. However, since the non-patent literature documents cited on page 6 of the PTO-1449 could not be found, the Examiner could not consider them. Applicants are respectfully requested to provide copies of these documents if they would like the Examiner to consider them.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 143 and 145 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 143 and 145 recite the limitation "the connector member." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

Art Unit: 3738

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 102, 103, 106-108, 111-118, and 122-123 are rejected under 35 U.S.C. 102(b) as being anticipated by Marin (US 5,397,355). Marin anticipates the claim language where the barbs as claimed are the barb (18) of Marin, and the tuck pads as claimed are the collinear barbs (16) and ribs (14) that hold and conceal the barb prior to deployment; see the figures and column 2, line 20 to column 3, line 31.

Claims 102, 103, and 107-119 are rejected under 35 U.S.C. 102(e) as being anticipated by Pollock et al (US 6,517,573). Pollock anticipates the claim language where the barb tuck pad as claimed is met by the frame (22) of Pollock, the barb as claimed is the hook with pointed end (26) and the struts as claimed are the frame elements (34); see the figures and column 4, lines 1-46.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3738

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 72-75, 78-82, 85-90, 92-96, 99, and 143-149 are rejected under 35

U.S.C. 103(a) as being unpatentable over Brown et al (US 2004/0088044) in view of

Marcade (US 5,676,696) or Chuter (US 5,693,084) or Robinson et al (US 5,733,325).

Brown discloses a stent where the number of apices in any particular ring can vary such that there are approximately two struts for every one in an adjacent ring; see the Figures 1b, 2 and 3 as well as paragraphs [0040] to [0052]. Brown fails to disclose the exact ratio of n to $2n$ apices in adjacent rings and the cantilevered connector elements as claimed. However, since the claimed ratio is within the range disclosed by Brown, it would have been prima facie obvious to one ordinary skill to utilize the claimed ratio especially in view of the fact that an approximate ratio is shown in the drawings; see MPEP 2144.05, which is incorporated herein by reference. Furthermore, Marcade (see Figure 1), Chuter (see Figure 2), and Robinson (see Figures 1 and 2) all independently teach that it was known to put cantilevered connector elements on similar stent in the art to better secure them to the adjacent tissue. Therefore, it is the Examiner's position that it would have been considered prima facie obvious to attach cantilevered connector elements to the Brown stent at the ends thereof, as taught by any of the secondary reference, in order to better attach the stent to the adjacent tissue.

Regarding claims 74 and 75, Brown as modified fails to disclose the use of barbs on other surfaces. However, since the secondary references teach adding barbs to various places on a stent, it is the Examiner's position that it would have been obvious

Art Unit: 3738

to add barbs to the struts as well in order to better attach the device to the graft or tissue adjacent thereto.

Regarding claim 80, the tapering as claimed is met by the two adjacent struts coming together at an angle to a point to form an apex.

Regarding claim 88, since the claim language only requires that a configuration exists that is capable of connecting to connector elements of an adjacent element, the Examiner asserts that the claimed structure is present in Brown as modified because it would be able to connect to an adjacent material.

With regard to claim 90, Marcade is seen as having a shoulder portion in the coil at one end thereof and at the barb on the other end thereof.

With regard to claims 92 and 93, Applicants are directed to see paragraph [0093].

With regard to claims 78 and 79, Brown as modified fails to teach the claimed size range. However, the mere recitation of a size does not in itself render an unpatentable device patentable; see MPEP 2144.04

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Claim 91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Marcade, Robinson, and Chuter as applied to claims 72-75, 78-82, 85-90, 92-96, 99, and 143-149, in further view of Wu et al (US 6,254,632). Brown fails to disclose having

Art Unit: 3738

grooves in the stent as claimed. However, Wu et al teaches that it was known to put grooves in stents; see the figures. Therefore, it is the Examiner's position that it would have been obvious to do the same in Brown for the same reasons that Wu et al does the same.

Claims 76 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Marcade, Chuter, and Robinson, as applied to claims 72-75, 78-82, 85-90, 92-96, 99, and 143-149, in further view of Marin (US 5,397,355). Brown as modified above fails to disclose the use of barb tuck pads. However, Marin teaches that it was known to use barb tuck pads in similar stents in order to prevent tissue unintended for engagement with the barb from being damaged. Therefore, it is the Examiner's position that it would have been obvious to utilize a barb tuck pad in conjunction with the barbs of Brown, as modified, in order to prevent tissue damage.

Claims 104 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marin (US 5,397,355) alone.

With regard to claims 104 and 105, Marin fails to teach the claimed size range. However, the mere recitation of a size does not in itself render an unpatentable device patentable; see MPEP 2144.04

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Art Unit: 3738

Allowable Subject Matter

Claims 83, 84, 97, 98, 100, 101, 120, and 121 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 124-142 are allowed over the prior art of record.

Conclusion


Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 USC 102 of 35 USC 103(a) once the aforementioned issue(s) is/are addressed.

Applicant is respectfully requested to provide a list of all copending applications that set forth similar subject matter to the present claims. A copy of such copending claims is respectfully requested in response to this Office action if the application is not stored in image format (i.e. the IFW system) or published.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Paul B. Prebilic whose telephone number is (571) 272-4758. He can normally be reached on 6:30-5:00 M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, McDermott Corrine can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Paul B. Prebilic
Primary Examiner

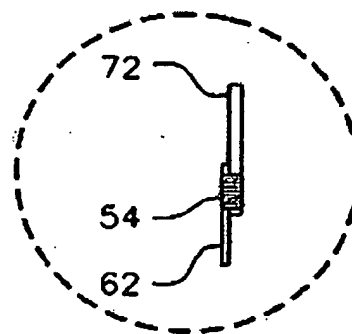
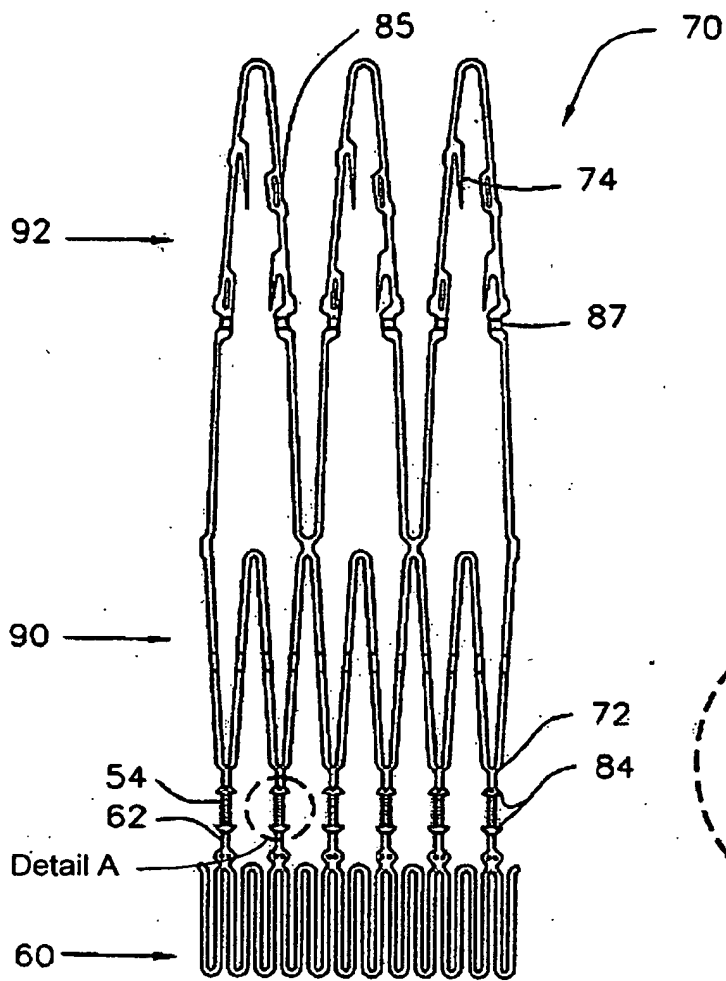


FIG. 5A

FIG. 5

Approved
for
Entry
PBP
4-28-05